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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,511	09/29/2006	Shinji Yasuhara	4731-0136PUS1	9948

2292 7590 01/08/2009

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER	
ALTUN, NURI B	

ART UNIT	PAPER NUMBER
3657	

NOTIFICATION DATE	DELIVERY MODE
01/08/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/587,511	YASUHARA ET AL.	
	Examiner	Art Unit	
	NURI ALTUN	3657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) *2,5 and 9* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,4,6-8,10 and 11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 July 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *08/16/06 07/09/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This communication is a first Office Action Non-Final rejection on the merits. Claims 1-11, as originally filed, are currently pending and have been considered below.

Election/Restrictions

Applicants' election with traverse of Species A, Sub-species I in the reply filed on 11/10/2008 is acknowledged. The traversal is on the ground(s) that applicants do not agree that 'all claims are directed to only Species B, and no claims are directed to Species A.' This is not found persuasive because examiner agrees that selected claims are readable on Species A. However no claims are specifically directed only to Species A. The requirement is still deemed proper and is therefore made FINAL.

Claims 2, 5 and 9 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 11/10/2008.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims **1 and 8** are rejected under 35 U.S.C. 102(b) as being anticipated by **Honda et al. (4,764,158)**.

Honda et al. teach a power transmission chain comprising: a plurality of link plates (2a) individually including through-holes (3a, 3b) and arranged in a chain advancing direction and a chain widthwise direction and with predetermined spacing; and a plurality of pins (5a, 5b) inserted through the through-holes for flexibly interconnecting the plural link plates (see Figs. 2 and 3) (Claim 1), and a first and a second pulley (20, 21) each possessing a pair of conical sheave surfaces opposing each other; and the power transmission chain entrained between these pulleys and contacting the sheave surfaces for power transmission (see Figs. 1 and 14 and col.6, lines 41-45) (Claim 8).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims **3, 4, 6, 7, 10 and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Honda et al. (4,764,158)**, in view of **Plaxton (3,706,604)**.

As per claims 3, 4, 10 and 11, Honda et al. teach a power transmission chain comprising: a plurality of link plates (2a, 11b) individually including through-holes (3a, 3b, 14a, 14b), and arranged as mutually overlapped in a thicknesswise direction thereof (see Fig. 5); and a plurality of pins (5a, 5b, 12a, 12b) inserted through the through-holes for flexibly interconnecting the plural link plates (see Fig. 13) (Claim 3) and a first and a second pulley (20, 21) each possessing a pair of conical sheave surfaces opposing

each other; and the power transmission chain entrained between these pulleys and contacting the sheave surfaces for power transmission (see Figs. 1 and 14 and col.6, lines 41-45) (Claims 10 and 11).

However, Honda et al. don't explicitly disclose link plates having their side surfaces covered by a coating material capable of being abraded or separated by using the chain (Claim 3), and the coating material comprises a phosphate coating film (Claim 4).

Plaxton teaches metals having their surfaces covered by a coating material capable of being abraded or separated by using the chain (col.1, lines 34-37, col.1, lines 49-50, it is also inherent that any kind of coating material can be abraded by some level of frictional force) (Claim 3), and the coating material comprises a phosphate coating film (col.1, lines 38-44) (Claim 4).

Based on this teaching of Plaxton, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the chain of Honda et al. to include the phosphate surface coating as taught by Plaxton in order to prevent corrosion and improve durability of the chain.

As per claim 6, Honda et al. teach a method of manufacturing a power transmission chain including: a plurality of link plates (2a, 11b) individually including through-holes (3a, 3b, 14a, 14b) and arranged as mutually overlapped in a thicknesswise direction thereof on their side surfaces (see Fig. 5); and a plurality of pins (5a, 5b, 12a, 12b) inserted through the through-holes for flexibly interconnecting the plural link plates (see Fig. 13), a pin lay-out step of laying out the plural pins at a

predetermined pitch (see Fig. 6 and col.3, lines 36-38); and an interconnection step of inserting the plural pins so arranged into the through-holes thereby sequentially interconnecting the link plates which are mutually overlapped on their side surfaces (see Fig. 5 and col.1, lines 58-63).

However, Honda et al. don't explicitly disclose the method comprising a coating step of coating the side surfaces of the plural link plates with a coating material capable of being abraded or separated by using the chain.

Plaxton teaches coating the surfaces of the metals with a coating material capable of being abraded or separated by using the chain (col.1, lines 34-37, col.1, lines 49-50, it is also inherent that any kind of coating material can be abraded by some level of frictional force).

Based on this teaching of Plaxton, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the chain of Honda et al. to include the surface coating as taught by Plaxton in order to prevent corrosion and improve durability of the chain.

As per claim 7, Honda et al. teach a method of manufacturing a power transmission chain including: a plurality of link plates (2a, 11b) individually including through-holes (3a, 3b, 14a, 14b) and arranged as mutually overlapped in a thicknesswise direction thereof on their side surfaces (see Fig. 5); and a plurality of pins (5a, 5b, 12a, 12b) inserted through the through-holes for flexibly interconnecting the plural link plates (see Fig. 13), a link-plate lay-out step of laying out the plural link plates

at predetermined positions and in overlapping relation with respect to the thicknesswise direction thereof (see Fig. 6 and col.3, lines 36-38); and

an interconnection step of interconnecting the plural link plates located at the predetermined positions by inserting the pins through the through-holes (see Fig. 5 and col.1, lines 58-63).

However, Honda et al. don't explicitly disclose the method comprising a coating step of coating the side surfaces of the plural link plates with a coating material capable of being abraded or separated by using the chain.

Plaxton teaches coating the surfaces of the metals with a coating material capable of being abraded or separated by using the chain (col.1, lines 34-37, col.1, lines 49-50, it is also inherent that any kind of coating material can be abraded by some level of frictional force).

Based on this teaching of Plaxton, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the chain of Honda et al. to include the surface coating as taught by Plaxton in order to prevent corrosion and improve durability of the chain.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The reference Van Rooij et al. (5,728,021) teach a transmission chain with same basic features. The reference Drysdale et al. (2,877,148) teach a method of phosphate coating surfaces of metals.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NURI ALTUN whose telephone number is (571)270-5807. The examiner can normally be reached on Mon-Fri 7:30 - 5:00 with first Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272 7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bradley T King/
Primary Examiner, Art Unit 3657

NBA